## **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

- 1. (Previously Presented) A sprayable, fiber-reinforced, strain-hardening hydraulically settable mortar, comprising:
  - a) a cement fraction comprising one or more hydraulically setting cements other than calcium aluminate cement;
  - b) a strain-hardening amount of from 0.1 to less than 4.0 volume percent of matrix interactive reinforcing fibers having a length of from about 4mm to about 30 mm, a fiber diameter of between 10  $\mu$ m, and 150  $\mu$ m, and interfacial chemical bonding of less than 4.0 J/m<sup>2</sup>;
  - c) at least one non-Newtonian additive in an amount to provide a mortar viscosity such that the mortar remains pumpable and sprayable, but exhibits a higher viscosity after spraying;
  - d) water in a ratio of water to the hydraulically setting cement fraction of 0.2:1 to 0.6:1;
  - e) a superplasticizer in an amount effective to provide a pumpable and sprayable mortar at the water content used;
  - f) a viscosity control agent in an amount of from 0.1 up to about 5 weight percent; and
  - g) optionally, aggregate in an amount up to about 200% by weight relative to the weight of the sprayable mortar.
- 2. (Original) The sprayable mortar of claim 1, wherein said non-Newtonian additive comprises an inorganic non-Newtonian additive.
- 3. (Previously Presented) The sprayable mortar of claim 1, wherein at least one non-Newtonian additive is calcium aluminate cement.

Atty Dkt No. UOM 0286 PUS

S/N: 10/674,773

Reply to Office Action of September 26, 2005

- 4. (Previously Presented) The sprayable mortar of claim 1, wherein at least one non-Newtonian additive is an organic polymer.
- 5. (Previously Presented) The sprayable mortar of claim 1 wherein at least one non-Newtonian additive is an associative thickener.
- 6. (Original) The sprayable mortar of claim 1 wherein said reinforcing fibers are present in an amount of 0.7 to 3.0 volume percent.
- 7. (Original) The sprayable mortar of claim 1 wherein said reinforcing fibers are present in an amount of 1.5 to 2.5 volume percent.
- 8. (Currently Amended) The sprayable mortar of claim 1, wherein said reinforcing fibers comprise one or more fibers selected from the group consisting of polyarylamide fibers, <u>high</u> density polyethylene fibers, and polyvinylalcohol fibers.
- 9. (Original) The sprayable mortar of claim 1 which exhibits a strain of at least 0.5%.
- 10. (Original) The sprayable mortar of claim 1 which exhibits a strain of at least 1.0%.
- 11. (Original) The sprayable mortar of claim 1 which exhibits a strain of at least 1.5%.
- 12. (Original) The sprayable mortar of claim 1, wherein said viscosity control agent comprises at least one viscosity control agent selected from the group consisting of modified celluloses and polyvinylalcohol.
  - 13. (Cancelled).

Atty Dkt No. UOM 0286 PUS

S/N: 10/674,773 Reply to Office Action of September 26, 2005

## 14 - 17. (Cancelled).

- 18. (New) The sprayable mortar of claim 1, wherein said reinforcing fibers exhibit a strength of 800 mPa or greater.
- 19. (New) The sprayable mortar of claim 1, wherein said reinforcing fibers have a modulus of elasticity of from 10 to 300 GPa.
- 20. (New) The sprayable mortar of claim 1, wherein said reinforcing fibers have an average fiber length between 6 and 20 mm and a diameter between 30 and 60  $\mu$ m.
- 21. (New) The sprayable mortar of claim 1, wherein said superplasticizer is present in am amount of from 0.3 weight percent to 5 weight percent based on the weight of the sprayable mortar.
- 22. (New) The sprayable mortar of claim 1, wherein calcium aluminate cement is present as a non-Newtonian additive, in an amount of from 2.5 weight percent to about 15 weight percent based on the total weight of cement fraction and calcium aluminate cement.
- 23. (New) The sprayable mortar of claim 1, wherein at least one cellulose derivative selected from the group consisting of methyl cellulose, hydroxyethylcellulose, hydroxypropylcellulose, and carboxymethyl cellulose is present, the total amount of cellulose derivatives being from 0.1 weight percent to about 5 weight percent based on the total weight of sprayable mortar.

-4-